

REMARKS

Re-examination and favorable reconsideration in light of the above amendments and the following comments are respectfully requested.

Claims 18 - 31 are pending in the application. Currently, claims 18 - 28 stand withdrawn from consideration and Claims 29-31 stand rejected.

By the present amendment, Applicant has amended claims 29 and 31 and added New Claims 32-34.

In the office action mailed March 10, 2010, the Examiner objected to the drawings and the specification. Appropriate amendments have been made to the drawings and the specification. Applicant respectfully requests that this objection be withdrawn.

Claim Rejections Under 35 USC §112, First Paragraph. Claims 29-31 stand objected to under 35 USC §112, first paragraph as failing to comply with the written description requirement. In response, Applicant has amended claim 29 to amend the preamble and to recite the step of an applying electricity to the high tension lead to generate an electromagnetic field in the core and to generate a spark for burning a fuel in the engine or machine. Claims 30-34 depend from claim 29 and are therefore allowable for at least the same reasons as claim 29. Applicant respectfully requests that this rejection be withdrawn.

. Claim Rejections Under 35 USC §112, Second Paragraph. Claims 29-31 stand rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses this rejection. Claim 29 has been amended as noted above. The term core merely refers to the item numbered 70 in Fig. 1, which is centrally located compared to the housing, for example. Claims 30-34 depend from claim 29 and are therefore allowable for at least the same reasons as claim 29. Applicant therefore respectfully requests that this rejection be withdrawn.

. Claim Rejections Under 103(a). Claims 29-31 stand rejected over US Patent 4,327,702 to Imai et al alone. Applicant respectfully traverses this rejection. As the Examiner has noted, the Imai et al reference does not teach or suggests a channel formed in a core, nor a lead running through the channel formed in the core. Claim 29 has been amended to more specifically recite that the core has semi-annular cross section. Such an advantageous geometry is clearly not taught or suggested in Imai et al.

Imai et al discloses “a spark ignition energy delivery cable 122” which is “in the form of a high tension resistance cable” (column 3, lines 55-57 and figures 8 and 9). The cable 122 comprises a metal resistance wire 125 which is wound around “a core made of glass fibres 123 covered with ferrite 124” (column 3, lines 56-58).

Imai et al also discloses a modified high tension lead 127 for delivering “plasma energy” to a spark plug. The lead 127 comprises a coil 130 which is wound around a core formed from glass fibres 128 which are covered with a ferrite 129 (column 3, lines 62-65). The plasma energy delivery lead 127 also incorporates an insulator layer 131 and a metal mesh layer 132 around the coil 130.

Figs. 9 and 10 of Imai show the cores 123,124 and 128,129 as elongate elements which have a circular cross-section. This results in the high tension leads 122,127 having an overall circular cross-section which is the configuration commonly used in the art. A person skilled in the art who follows the teaching of Imai et al would therefore be led to construct a high tension lead by winding wire around a core of circular cross-section in order to produce a high tension lead having an overall circular cross-section.

It would not be obvious to a person skilled in the art to modify the cores 123,124 and 128,129 to have a semi-annular cross-section instead of a circular cross-section because the modification would depart from the circular cross-section which is used

commonly in the art. Furthermore, Imai et al provides no incentive at all for a person skilled in the art to modify the shape of the cores 123,124 and 128,129 beyond the circular cross-section shape shown in figures 9 and 10.

Neither of the cores 123,124 or 128, 129 incorporates a channel and Imai et al does not disclose a method which comprises the step of locating at least part of a high tension lead in a channel.

It would be difficult for a person skilled in the art to provide a channel in either of the cores 123,124 or 128,129 so that the resistance wire 125,130 can be located and retained in the channel. This difficulty arises because the resistance wire 125,130 is wound in a tight coil around the core 123,124 and 128,129 and so a complex helical channel would have to be formed around the core 123,124 and 128,129 in order to receive the wire 125,130. It would not be obvious to a person skilled in the art to make this difficult modification, particularly since Imai et al provides no incentive at all to a person skilled in the art to make the modification.

Fig. 3 of Imai et al shows a magnetic layer 17 which may be of a ferrite material (column 2, lines 65-66). The magnetic layer 17 surrounds a conducting wire 16 which is wound around a core 15. The magnetic layer 17 is provided to suppress high frequency components of noise radiated from the wire 16 (column 2, line 68 to column 3, line 3).

The magnetic layer 17 could be interpreted as a core which is of ferrite material. The magnetic layer 17 has an annular cross-section with the wire 16 and the core 15 running through its centre. This annular magnetic layer 17 encases the wire 16 to suppress noise emanating in all directions from the wire 16.

A person skilled in the art would not think to modify the shape of the magnetic layer 17 to be semi-annular because the modification would result in part of the wire 16 not being encased in the magnetic layer 17. The wire which is no longer encased in the magnetic

layer 17 would radiate noise. The modification would therefore depart from the teaching of Imai et al which is concerned solely with the suppression of noise. It would not be obvious to a person skilled in the art to go against the teaching of Imai et al by modifying the magnetic layer 17 to be semi-annular.

It is not an obvious matter of design choice for a person skilled in the art to depart from the teaching of Imai et al to reach the present invention.

Claims 30-31 depend from Claim 29 and are therefore allowable for at least the same reasons as claim 29.

. New Claims 32-34. New Claims 32-34 all depend ultimately from claim 29 and recite additional advantageous elements of Applicant's invention, including a housing for the core comprising a cover and a mounting plate, pegs on the housing, and balancing elements on the pegs. These elements are also not taught or suggested in Imai et al. Therefore these new claims are also allowable.

. Conclusion. Applicant respectfully requests that this rejection be withdrawn and that all of the claims be allowed.

Should the Examiner believe an additional amendment is needed to place the case in condition for allowance, the Examiner is hereby invited to contact Applicant's attorney at the telephone number listed below.

A request for a one month extension of time is enclosed. The Director is hereby authorized to charge the extension of time fee in the amount of \$65.00 to Deposit Account No. 02-0184.

Should the Director determine that an additional fee is due, he is hereby authorized to charge said fee to said Deposit Account No. 02-0184..

Respectfully submitted,
Seng Teck Law

By/Barry L. Kelmachter #299999/
Barry L. Kelmachter
BACHMAN & LaPOINTE, P.C.
Reg. No. 29,999
Attorney for Applicants
Telephone: (203)777-6628
Telefax: (203)865-0297
Email: docket@bachlap.com

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